

Manchester Metrology LTD

Portable Measurement Solutions

# FARO Edge ScanArm® HD

[www.Manchester-Metrology.co.uk](http://www.Manchester-Metrology.co.uk)



## Rapid Scanning Speed

The extra wide scan stripe and fast frame rate boosts productivity by increasing coverage and reducing scanning time.

## High Definition Data

Intricate components can be captured in fine detail as a result of the 2,000 actual points per scanline and the new blue laser featuring noise reduction technology.

## Scan Challenging Materials

Seamlessly scan across diverse surface materials regardless of contrast, reflectivity or part complexity without any special coatings as a result of the improved HDR (High Dynamic Range) Mode and advanced software algorithms.

## Compact and Simple to Use

Dramatically reduce required training time with the new crosshair feature and existing LED Rangefinder functionality which provides real-time scanning feedback. The small size and friendly user-interface result in a versatile and intuitive tool.

## Highly Accurate and Repeatable

Reliable, repeatable and highly accurate measurement data is delivered with confidence as a result of superior optical performance.

The Edge ScanArm HD is the latest advancement in FARO's ScanArm product line and provides point cloud capture with rapid speed, superior resolution and high accuracy — all in a compact and easy-to-use system. New functionalities allow users to seamlessly scan across diverse surface materials regardless of contrast, reflectivity or part complexity without any special coatings or target placement.

The FARO Edge ScanArm HD combines the convenience of a FaroArm with the power of a Laser Line Probe creating the world's most affordable, high performance contact/non-contact portable measurement system.

## Most Common Applications

**Aerospace:** Reverse engineering, certification, part inspection

**Automotive:** Tool building & certification, alignment, part inspection

**Metal fabrication:** OMI, first article inspection, periodic part inspection

**Moulding/tool & die:** Mould and die inspection, prototype part scanning

## Benefits

- ▶ Reduced measurement times
- ▶ Simplified user experience
- ▶ Scan across diverse surface materials without any special surface preparation or target placement
- ▶ Exceptional scan rate up to 560,000 points/second

### FARO Laser Line Probe Specifications

Accuracy:	±25µm (±0.0008")	Points per line:	2,000 points/line
Repeatability:	25µm, 2σ (0.01")	Minimum point spacing:	40µm, (0.0015")
Stand-off:	115mm (4.5")	Scan rate:	280 frames/second, 280fps x 2,000 points/line = 560,000 points/sec
Depth of field:	115mm (4.5")	Laser:	Class 2M
Effective scan width:	Near field 80mm (3.1") Far field 150mm (5.9")	Weight:	485g (1.1lbs.)

Accuracy and repeatability specified at Full Field of View (FOV); High Accuracy mode specified at reduced FOV.

### Performance Specifications

#### Contact

Measurement Range (m/ft)	Repeatability* (mm/inch)		Accuracy** (mm/inch)		FaroArm Weight (kg/lbs.)	
	7 axes		7 axes		7 axes	
Edge 1.8 6	0.024	±0.034	10.7	0.0009	±0.0013	23.6
	0.029	±0.041	10.9	0.0011	±0.0016	24.1
Edge 2.7 9	0.064	±0.091	11.3	0.0025	±0.0035	24.9
	0.029	±0.041	10.9	0.0011	±0.0016	24.1

FaroArm test methods - (Test methods are a subset of those given in the B89.4.22 standard.)

\*Single point articulation performance test (Max-Min)/2: The probe of the FaroArm is placed within a conical socket, and individual points are measured from multiple approach directions as specified by ASME the B89.4.22-2004 standard. Each individual point measurement is analyzed as a range of deviations in X, Y, Z. \*\*Volumetric maximum deviation: Determined by using 20 traceable lengths measured at locations and orientations throughout the working volume of the FaroArm as specified by the ASME B89.4.22-2004 standard. This test is a method for determining articulated arm accuracy. Accuracy and repeatability specified at Full Field of View (FOV); High Accuracy mode specified at reduced FOV.

### Hardware Specifications

Operating temp range:	10°C - 40°C (50°F - 104°F)
Temperature rate:	3°C/5min. (5.4°F/5min.)
Operating humidity range:	95%, noncondensing
Power supply:	Universal worldwide voltage 100-240VAC 47/63Hz

**Certifications:** Meets OSHA requirements, NRTL Listed, MET-C Listed, Complies with Electronic Code of Federal Regulations 47 CFR PART 15 and 21 CFR 1040 Performance standards For Light-Emitting Products. Complies with the following EC Directives: 93/68/EEC CE Marking; 2004/108/EC Electrical Equipment; 1999/5/EC R&TTE Directive; 2011/65/EU RoHS2; 2002/96/EC WEEE; 2006/66/EC WEEE; 2006/66/EC Batteries and Accumulators; 2006/95/EC Low Voltage Directive; 2009/125/EC Ecodesign requirement, Conforms to the following standards: EN 61010-1:2010 / CSA-C22.2 No. 61010-1; EN 61326-1:2006; IEC 60825-1 ed3.0 (2014);2007; FDA (CDRH) 21 CFR 1040.10 / ANSI Z136.1-2007; IEEE 802.11 b/g; FCC Part 15 Subpart C / IC RSS-210 and ESTI EN 300/301 (WLAN and Bluetooth); UN T1-T8; Japanese Radio Law MPT No. 37 Ordinance (MIC classification WW), Patents: 5402582, 5611147, 5794356, 6366831, 6606539, 6904691, 6925722, 6935036, 6973734, 6988322, 7017275, 7032321, 7043847, 7051450, 7069664, 7269910, 7735234, 7784194, 7804602, 7881896, RE42055, RE42082



FARO offers optional VDI/VDE 2617-9 certification for an additional charge. Please ask your sales representative for details.